S/N: 10/829,575 Reply to Office Action of February 16, 2006



## **Amendments to the Specification:**

Please amend Paragraph 22 of the Specification as follows:

In one of the exemplary embodiments, the apparatus comprises a square root converter and a logarithmic generator, and provides a substantially linear relationship between an input signal and a selected parameter. The square root converter is couplable to receive the input signal, and is adapted to provide or otherwise capable of providing a square root signal which is substantially proportional to a square root of the input signal. The logarithmic generator is also couplable to receive the input signal and coupled to the square root converter. The logarithmic generator generates a logarithmic signal which is substantially proportional to a logarithm of the input signal. The logarithmic generator 230 may also have a combining functionality, providing an applied signal which is substantially proportional to a sum of a logarithm of the input signal plus the square root signal. The logarithm of the input signal is provided by the logarithmic generator as substantially equivalent to a 3/2 power of the input signal. The exemplary apparatus may further comprise an oscillator (150) coupled to receive the applied signal, wherein an oscillation frequency of the oscillator is the selected parameter and is substantially linearly tunable in response to the input signal.